Statement of Linton F. Brooks

National Nuclear Security Administration

U. S. Department of Energy

Before the

Energy and Natural Resources Committee

United States Senate

July 10, 2002

Introduction

Thank you, Mr. Chairman for having me here today. This is an exciting time: the United States is on the verge of establishing a new Government Agency that will have sweeping responsibilities. It will enable us to more effectively respond to today's threats, through a streamlined and dynamic institution that will greatly enhance our ability to respond quickly, decisively, and where necessary, before threats against our homeland materialize. In short, we are on the verge of making history. It's critical that we get it right.

The Department of Energy and the National Nuclear Security Administration are fully committed to the homeland security mission, and the successful establishment of the Department of Homeland Security. We recognize that this will require some restructuring and relocation of critical assets now under the stewardship of the NNSA. We are prepared to support these shifts in responsibilities, and indeed, to do what is necessary to make any transfer of responsibilities as smooth and painless as possible.

There is an enormous amount of experience and expertise now residing in DOE/NNSA that will be vital to the success of the new Department. Our Technology Research and Engineering assets have been applied to homeland security problems long before last September; since then, such contributions became even more focused and accelerated.

We've conducted the PROTECT subway demonstration, which will help provide chemical protection to the U.S. population. We deployed a prototype biodetection capability at the winter Olympics. We have greatly increased our work with the U.S. Customs and Coast Guard with radiation and nuclear technology – specific areas that will directly benefit the new Department. DOE/NNSA is committed to ensuring that its assets can continue to provide enabling science and technology to support homeland security and counter-terrorism mission needs.

There are a number of capabilities currently residing in the Department of Energy that will support or be transferred to the new Department. Today I want initially to focus on those relevant to Title III of the legislation, that is, those germane to technology research and development in support of the Homeland Security mission.

We currently support the FBI in its role as "lead agency" in responding to an emergency within the United States, including a potential nuclear emergency. We expect that these emergency response functions will play a major role in supporting the Homeland Security mission, as stipulated in Title V of the Bill. I want to discuss these functions as well.

Before turning to those topics, let me briefly mention a few things that the Homeland Security Act does not do. It will not affect our ability to conduct our principle missions of stockpile stewardship, nuclear nonproliferation, naval reactors, and, just coming to NNSA, emergency response. NNSA will retain all of its programs and responsibilities that contribute to our ability to assure the safety, security, and reliability of the nation's nuclear weapons stockpile.

With respect to nuclear nonproliferation, the Administration proposes to transfer the core of our chemical-biological WMD work and certain nuclear programs related to the domestic threat. This is largely self-contained work and almost exclusively supports domestic preparedness programs.

NNSA has unique assets and capabilities, developed primarily from our work with nuclear weapons and with nonproliferation, that have been applied to homeland security problems long before last September.

Some of these initiatives have long timelines. Long before 9/11, DOE has led USG efforts to support "first responders" with our chemical, biological, and nuclear research programs. We've worked closely with the FBI and other agencies to ensure that cutting edge detection and identification technologies are available to those that would need them first. And we began this work long before there was a recognized need to do so – we took the initiative because we anticipated the requirement. It is as good an example as any of why long-range research is so critical to the security of this country.

We have aggressively pursued these efforts since last 9/11. But it's time for a more focused organization and we are committed to that change and to continuing to provide enabling science and technology in support of homeland security and counter-terrorism mission needs.

Title III Issues

The NNSA Nonproliferation and Verification Research and Development Program conducts applied research, development, testing, and evaluation of technologies that lead to prototype demonstrations and resultant detection

systems. As such, the program strengthens the U.S. response to current and projected threats to national security worldwide posed by the proliferation of nuclear, chemical, and biological weapons and the diversion of special nuclear material. The R&D program provides operational organizations with innovative systems and technologies to satisfy their nonproliferation and counter-terrorism mission responsibilities. The program's four main elements are:

- Nuclear explosion monitoring, which will remain within the Department of Energy

- Chemical and Biological National Security, which will be transferred in its entirety to the Department of Homeland Security

- Proliferation Detection, and

- Supporting Activities

Within the proliferation detection program is an element on nuclear smuggling that will be transferred to the Department of Homeland Security. Proliferation detection has aspects that support both nonproliferation and homeland security. Those elements that can be disaggregated and identified as supporting homeland security will be transferred to the new Department. Where the activity supports both the homeland security and non-proliferation functions, we will examine such arrangements as joint programs. The Administration's proposed legislation gives the President the necessary flexibility to provide for joint operation.

Let me describe those functions that will be transferred, after which I will return to the subject of long-term coordination.

Major Activities Identified for Transfer

Within, the Nonproliferation and Verification Research and Development Program, the Chemical and Biological National Security Program and the nuclear smuggling detection activity fall squarely into the Homeland Security mission and thus have been designated for transfer in their entirety.

The Chemical and Biological National Security Program develops and applies detection technologies entirely for domestic homeland mission requirements, such as a prototype biological detection system used at the Salt Lake City Olympics and a prototype chemical detection system currently being installed in Washington D.C.'s metro system. The nuclear smuggling detection directly supports U.S. homeland nuclear detection requirements, such as a nuclear detection system designed for regional deployment, for example around a major city. I wish to describe each program briefly, and then also discuss our nuclear assessments program, which is also to be transferred.

Chemical and Biological National Security Program

The Chemical and Biological National Security Program works to develop technologies and systems to improve the U.S. capability to prepare for and respond to domestic chemical and biological threats against civilian populations, complementing DOD's focus on the battlefield and military installations. As part of its primary nuclear science and technology mission, NNSA and the National Laboratories have developed extensive capabilities in chemistry, biology, and materials and engineering sciences that form the basis for the NNSA chemical and biological national security program. We have conducted research on the biological foundations necessary to establish signatures of biological threat agents and develop assays certified by the Centers for Disease Control for those agents, which are applied to develop detectors.

NNSA has conducted demonstration projects of prototype detector capabilities in partnership with other agencies to support their operational missions, such as the systems I just mentioned that have been developed and applied for the Olympics and the Washington Metro, to illustrate possible system approaches for population protection. We are now working to expand the number of signatures and assays of biological agents that we can detect with increased sensitivity, and to improve public health response through the CDC. The next generation of bio-detectors will detect a much wider range of agents, which will enable public health agencies to more rapidly treat affected people.

Homeland Security Nuclear Smuggling Activities

The nuclear smuggling component of our proliferation detection program also squarely fits within homeland security and will be transferred. NNSA and the National Laboratories have unique insight into nuclear proliferation activities — the facilities and infrastructure, as well as the observable signatures of nuclear weapon development activity. We also have the capability to develop technical solutions for the U.S. government to detect and characterize such proliferation activities in their early stages. NNSA has worked closely with homeland security agencies, including U.S. Customs, U.S. Coast Guard, and the Departments of Transportation and Justice to apply this technical base to detection of nuclear weapons and materials at U.S. borders. We have previously conducted demonstrations with these agencies of radiation detection methods at an international border station, a port, a rail yard, and airport personnel and baggage handling facilities. With many of these agencies becoming part of the new Department, it is a good fit for the R&D applications to counter nuclear smuggling to be transferred to the Department of Homeland Security.

Nuclear Threat Assessment and Trafficking in Nuclear Materials

The Department of Energy's Nuclear Assessment Program provides a national capability to assess accurately and swiftly the credibility of

communicated threats of nuclear terrorism. The Lawrence Livermore National Laboratory (LLNL) leads this unique effort. Since September 1978, the Nuclear Assessment Program has been used to assess the credibility of over 60 nuclear extortion threats, 25 nuclear reactor threats, 20 non-nuclear extortion threats and approximately 650 cases involving the reported or attempted illicit sale of nuclear materials.

When activated, DOE-based threat credibility assessment teams perform comprehensive technical, operational and behavioral assessments of communicated nuclear threats at the start of an actual or perceived emergency. Since communicated nuclear threats are a serious violation of federal law, the FBI is the lead federal agency. Since the Program's inception in 1977, the Nuclear Assessment Program has developed close and working relationships with its counter-terrorism counterparts in Customs, State, FBI, DIA, CIA, and others in the nonproliferation community. The Program also provides expert technical support to law enforcement and others for Special Event Preparedness, on-scene technical support, and national and international training.

Since 9/11 the Nuclear Assessment Program has performed approximately 70 assessments involving communicated nuclear threats, reports of illicit trafficking of nuclear materials, and special analysis reports for law enforcement and intelligence components. This national asset provided immeasurable support to all government agencies tasked with separating critical from non-critical information in the aftermath of 9/11.

Title V Issues

I want to now turn to emergency response, and Title V of the proposed bill.

The Department is prepared to respond immediately, anywhere in the world, to discrete and specific nuclear-radiological incidences and emergencies. People and equipment are trained, and they are ready to respond right now.

There are seven basic teams that make up this nuclear-radiological incident response capability, which includes nuclear emergency support activities. These include aerial measurement teams, accident response groups, and a radiological assistance program that works closely with state and local agencies. Through these tailored and responsive teams, NNSA marshals highly trained and unique scientific and technical expertise, drawing across the NNSA resources and the Department as a whole.

There are more than 900 individuals on call to respond in the event of a nuclear-radiological incident or emergency. Only a handful of these – about 70 – are full time. It is the ability to call upon a broad range of professionals from across the weapons complex that brings this program its depth and ability to respond to a wide range of crises or emergencies.

Comparisons to volunteer fire departments or National Guard units have been made; these teams are staffed with nuclear professionals who take this work on as additional duty. Day-to-day, they are the individuals who ensure the safety, the security, and the reliability of our nuclear weapons stockpile. It is this everyday work that qualifies them for serving in an emergency.

To support the new Department, we envisage that these teams would, when requested, be activated and deployed to help manage a crisis; in other words, current practices would prevail. The team members would continue to work in their current jobs in the Department of Energy and the NNSA. In response to a WMD incident, our teams would deploy under the authority of the Department of Homeland Security. We do not anticipate that the DOE-NNSA capabilities or response to a nuclear-radiological accident or incident would be compromised in any way by this transfer of operational control for specific domestic responses.

Observations

With the transfer of Title III programmatic responsibilities to the Department of Homeland Security, it will be critically important that the new Department maintain the technical base at the National Laboratories, so that the capability and the scientific atmosphere to pursue high risk, long-term research be encouraged in spite of the need to focus on short-term requirements for homeland security. It is the ability to pursue such research that makes our national laboratories a national treasure – and a unique asset with unmatched capabilities. Only through such investment will the scientific and technical capability exist to meet the needs for innovative solutions to future homeland security problems.

With respect to the remainder of the proliferation detection program, no matter how the responsibilities are finally apportioned, the research will be of value to both departments. For that reason, it is critical that we work together closely. By so doing, our nonproliferation and homeland security efforts will continue to benefit from the unparalleled capabilities of the National Laboratories.

I support fully the concept of locating the new Department's main research facility at Lawrence Livermore, with satellite centers of excellence located at other national laboratories. It will create a campus-like environment where cientists will be dedicated, full-time, to thinking about homeland security, and it will allow for direct interaction with the expertise that resides at the other DOE labs as well as other labs throughout the federal government. It's good for DOE and it's good for the Department of Homeland Security.

Just as DOE and NNSA fully support the transfer of programs as stipulated in Section 302 of the bill, we also believe that Title V of the bill is the

right way to incorporate the NNSA nuclear emergency response assets into the operations of the new department.

Conclusion

I want to reiterate in no uncertain terms: The National Nuclear Security Administration supports fully the transfer of the programs noted in Section 302(2) of the bill under discussion. The details of what would be included in the legislative package were worked out directly with my office. These programs are a natural fit for the Department of Homeland Security, whose primary mission is the critical task of protecting the United States from catastrophic terrorism. DOE/NNSA will also work to ensure that its assets can continue to contribute enabling science and technology in support of DHS mission needs.

Obviously, that is a goal that I am pleased to support wholeheartedly. I believe that the Bill as being discussed goes a long way toward its realization.

Thank you, and I look forward to any questions you may have.